

## Lebenslauf

Prof. Dr. med.  
Michael Linnebank



Geburtsdatum:	26. August 1974
Geburtsort:	Soest, Westf.
Familienstand:	Verheiratet, vier Kinder
Derzeitige Position:	Chefarzt für Neurologie und Ärztlicher Direktor, VAMED Klinik Hagen-Ambrock und Leitender Neurologe, Helios Klinikum Niederberg

## Bildungsweg

1981-1985	Grundschule Welver, Kreis Soest
1985-1994	Aldegrever-Gymnasium Soest, Abitur
1994-1995	Zivildienst
1995-2001	Medizinstudium an der Westfälischen Wilhelms-Universität Münster
2001	Vorläufige Approbation
2002	Dissertation: Molekulargenetische Untersuchungen zur Prävalenz und zum genetischen Hintergrund der klassischen Homocystinurie (Prof. Dr. H.-G. Koch, Kinderklinik, Universitätsklinikum Münster)
2003	Approbation
2007	Facharzt für Neurologie
2009	Habilitation an der Universität Zürich, Medizinische Fakultät: Zur Bedeutung des Homocysteinstoffwechsels für zerebrovaskuläre, neuroonkologische und neurodegenerative Erkrankungen
2014	Ruf auf die Assistenzprofessur „Neurobiochemie und Motorik“, Universität Zürich, Antritt 01.02.2015
2016	Umhabilitation und APL-Professur, Lehrstuhl für Rehabilitationswissenschaften, Universität Witten/Herdecke, 01.04.2016
2017	Qualifikation zur fachgebundenen genetischen Beratung;

## Berufliche Tätigkeit

2002-2007	Arzt im Praktikum/ Assistenzarzt und „Gerok“-Stipendiat, Klinik für Neurologie, Prof. Dr. Thomas Klockgether, und Klinik für Epileptologie, Prof. Dr. Christian E. Elger, Universitätsklinikum Bonn
2008-2009	Oberarzt, Klinik für Neurologie, Universitätsspital Zürich, Prof. Dr. Michael Weller
2010	Leitender Arzt, Klinik für Neurologie, Universitätsspital Zürich, Prof. Dr. Michael Weller
2014	Stellvertretender Klinikdirektor, Klinik für Neurologie, Universitätsspital Zürich, Prof. Dr. Michael Weller
2015	April: Chefarzt für Neurologie und Ärztlicher Direktor der Helios-Klinik Hagen-Ambrock, weiterhin Leitender Arzt der Klinik für Neurologie, Universitätsspital Zürich bis September 2016
2017	Peer der "Initiative Qualitätsmedizin"

## Mitgliedschaften

Deutsche Gesellschaft für Neurologie, Ärztlicher Beirat der DMSG BV E.V., Rehabilitation Initiative and Technology Platform Zurich, Zentrum für Neurowissenschaften Zürich, ehem. Vorstand und wissenschaftlicher Beirat der Schweizerischen Multiple-Sklerose-Gesellschaft und Mitglied des International Medical and Scientific Board der Multiple Sclerosis International Federation, D.A.CH-Liga Homocystein, Steering-Committee der Fampridin-Phase-III-Studie „ENABLE“ (Biogen)

## Gutachtertätigkeit für Institutionen

Deutsche Forschungsgemeinschaft, Schweizerischer Nationalfonds, Schweizerische Multiple-Sklerose-Gesellschaft, Parkinson UK, Health Research Board Ireland, Neurological Foundation of New Zealand

## Gutachtertätigkeit für Zeitschriften

Addiction Biology, American Journal of Medical Genetics, Annals of Neurology, Archives of Medical Research, Asia Pacific Journal of Clinical Nutrition, Atherosclerosis, BMC Neurology, BMJ, Brain, Brain Research, Cancer Epidemiology Biomarkers and Prevention, Cell Biology and Toxicology, Central European Journal of Medicine, Clinical Chemistry and Laboratory Medicine, Clinical Nutrition, European Journal of Neurology, European Neuropsychopharmacology, Experimental Neurology, Human Mutation, International Journal for Vitamin and Nutrition Research, International Journal of Developmental Neuroscience, International Journal of Neuropsychopharmacology,

Journal of Inherited Metabolic Disorders, Journal of Medical Genetics, Journal of Neuroinflammation, Journal of Pediatric Neurology, Journal of Rheumatology, Neurobiology of Disease, Neuropediatrics, Neuroscience Letters, Neurotoxicology, Progress in Neuro-Psychopharmacology & Biological Psychiatry, Swiss Archives of Neurology, Swiss Medical Weekly, Thrombosis and Haemostasis, PlosOne, Deutsche Forschungsgemeinschaft, Molecular Nutrition and Food Research

### **Multizentrische Studien**

Steering-Committee der Fampridin-Phase-III-Studie „ENABLE“ (Biogen Idec), verschiedene Register für krankheitsmodifizierende oder symptomatische Therapien der Multiplen Sklerose, lokaler Principle Investigator klinischer Studien, Investigator-initiierte Studien (s. Schriftenverzeichnis)

### **Auswahl: Vorträge, Organisation von Kongressen und Symposien**

Deutsche Gesellschaft für Neurologie; Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde; European Neurological Society; European Committee for Treatment and Resarch in Multiple Sclerosis; Jahrestagung der Schweizerischen Neurologen-Gesellschaft; Multiple-Sklerose-Symposium Zürich; State of the Art: Symposium der Schweizerischen Multiple-Sklerose-Gesellschaft; Deutsche Gesellschaft für Hämatologie und Medizinische Onkologie; International Multiple Sclerosis Cognition Society; Dreiländersymposium Multiple Sklerose; Deutsche Vereinte Gesellschaft für Klinische Chemie und Laboratoriumsmedizin; Arbeitsgemeinschaft für Pädiatrische Stoffwechselerkrankungen; Annual Fulda Meeting; Schweizer Gesellschaft für Allergologie und Immunologie; World Congress Homocysteine; Society for the Study of Inborn Errors of Metabolism; Jahrestagung der Deutschen Gesellschaft für Neurorehabilitation (DGNR) e. V. und der Deutschen Gesellschaft für Neurotraumatologie und Klinische Neurorehabilitation (DGNKN) e. V.

## Schriftenverzeichnis

### Originalarbeiten

Filli L, Sutter T, Easthope CS, Killeen T, Meyer C, Reuter K, Lörincz L, Bolliger M, Weller M, Curt A, Straumann D, **Linnebank M**, Zörner B. Profiling walking dysfunction in multiple sclerosis: characterisation, classification and progression over time. *Sci Rep.* 2018 Mar 21;8(1):4984. doi: 10.1038/s41598-018-22676-0. PMID: 29563533.

Broicher SD, Filli L, Geisseler O, Germann N, Zörner B, Brugger P, **Linnebank M**. Positive effects of fampridine on cognition, fatigue and depression in patients with multiple sclerosis over 2 years. *J Neurol.* 2018 Feb 20. doi: 10.1007/s00415-018-8796-9. Epub ahead of print, PMID:29464379.

Filli L, Zörner B, Killeen T, **Linnebank M**. Author response: Monitoring long-term efficacy of fampridine in gait-impaired patients with multiple sclerosis. *Neurology.* 2017 Sep 12;89(11):1200. Epub 2017 Sep 11. doi: 10.1212/WNL.0000000000004379. PMID: 28894033.

Ineichen BV, Kapitza S, Bleul C, Good N, Plattner PS, Seyedsadr MS, Kaiser J, Schneider MP, Zörner B, Martin R, **Linnebank M**, Schwab ME. Nogo-A antibodies enhance axonal repair and remyelination in neuro-inflammatory and demyelinating pathology. *Acta Neuropathol.* 2017 Jun 23. doi: 10.1007/s00401-017-1745-3. PMID:28646336

Killeen T, Easthope CS, Demkó L, Filli L, Lörincz L, **Linnebank M**, Curt A, Zörner B, Bolliger M. Minimum toe clearance: probing the neural control of locomotion. *Sci Rep.* 2017 May 15;7(1):1922. doi: 10.1038/s41598-017-02189-y. PMID: 28507300

Ineichen BV, Schneider MP, Hlavica M, Hagenbuch N, **Linnebank M**, Kessler TM. High EDSS can predict risk for upper urinary tract damage in patients with multiple sclerosis. *Mult Scler.* 2017 Mar 1:1352458517703801. doi: 10.1177/1352458517703801. PMID: 28367674

Killeen T, Easthope CS, Filli L, Lörincz L, Schrafl-Altermatt M, Brugger P, **Linnebank M**, Curt A, Zörner B, Bolliger M. Increasing cognitive load attenuates right arm swing in healthy human walking. *R Soc Open Sci.* 2017 Jan 25;4(1):160993. doi: 10.1098/rsos.160993. eCollection 2017 Jan. PubMed PMID: 28280596; PubMed Central PMCID: PMC5319362

Semmler A, Frisch C, Bleul C, Smith D, Bigler L, Prost JC, Blom H, **Linnebank M**. Intrauterine valproate exposure is associated with alterations in hippocampal cell numbers and folate metabolism in a rat model of valproate teratogenicity. *Seizure.* 2017 Mar;46:7-12. doi: 10.1016/j.seizure.2017.01.003. Epub 2017 Jan 27. PubMed PMID: 28212902.

Nuvolone M, Schmid N, Miele G, Sorice S, Moos R, Schori C, Beerli RR, Bauer M, Saudan P, Dietmeier K, Lachmann I, **Linnebank M**, Martin R, Kallweit U, Kana V, Rushing EJ, Budka H, Aguzzi A. Cystatin F is a biomarker of prion pathogenesis in mice. *PLoS One.* 2017 Feb 8;12(2):e0171923. doi: 10.1371/journal.pone.0171923. eCollection 2017. PubMed PMID: 28178353; PubMed Central PMCID: PMC5298286.

Filli L, Zörner B, Kapitza S, Reuter K, Lörincz L, Weller D, Sutter T, Killeen T, Gruber P, Petersen JA, Weller M, **Linnebank M.** Monitoring long-term efficacy of fampridine in gait-impaired patients with multiple sclerosis. *Neurology*. 2017 Feb 28;88(9):832-841. doi: 10.1212/WNL.0000000000003656. Epub 2017 Feb 1. PubMed PMID: 28148629.

Ineichen BV, Plattner PS, Good N, Martin R, **Linnebank M**, Schwab ME. Nogo-A Antibodies for Progressive Multiple Sclerosis. *CNS Drugs*. 2017 Mar;31(3):187-198. doi: 10.1007/s40263-017-0407-2. PubMed PMID: 28105588.

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Ineichen BV, Schnell L, Gullo M, Kaiser J, Schneider MP, Mosberger AC, Good N, **Linnebank M**, Schwab ME. Direct, long-term intrathecal application of therapeutics to the rodent CNS. *Nat Protoc*. 2017 Jan;12(1):104-131. doi: 10.1038/nprot.2016.151. Epub 2016 Dec 15. PubMed PMID: 27977023.

**Linnebank M**, McDougall CG, Krueger S, Biskup S, Neumann M, Weller M, Valavanis A, Prudlo J. Novel cases of amyotrophic lateral sclerosis after treatment of cerebral arteriovenous malformationss. *Swiss Med Wkly*. 2016 Nov 12;146:w14361. doi: 10.4414/smw.2016.14361. eCollection 2016. PubMed PMID: 27878793.

Geisseler O, Pflugshaupt T, Bezzola L, Reuter K, Weller D, Schuknecht B, Brugger P, **Linnebank M.** The relevance of cortical lesions in patients with multiple sclerosis. *BMC Neurol*. 2016 Oct 21;16(1):204. PubMed PMID: 27769199; PubMed Central PMCID: PMC5073896.

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Geisseler O, Pflugshaupt T, Buchmann A, Bezzola L, Reuter K, Schuknecht B, Weller D, **Linnebank M**, Brugger P. Random number generation deficits in patients with multiple sclerosis: Characteristics and neural correlates. *Cortex*. 2016 Sep;82:237-43. doi: 10.1016/j.cortex.2016.05.007. Epub 2016 May 21. PubMed PMID: 27403852.

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Bleich S, Semmler A, Frieling H, Thumfart L, Muschler M, Hillemacher T, Kornhuber J, Kallweit U, Simon M, **Linnebank M**. Genetic variants of methionine metabolism and DNA methylation. *Epigenomics*. 2014;6(6):585-91. doi: 10.2217/epi.14.54. PubMed PMID: 25531253.

Haschemi Nassab M, Rhein M, Heese P, Glahn A, Frieling H, **Linnebank M**, Bleich S, Kornhuber J, Heberlein A, Grallert H, Peters A, Rawal R, Strauch K, Hillemacher T. No association between the ALDH2 promoter polymorphism rs886205, alcohol dependence, and risky alcohol consumption in a German population. *Psychiatr Genet*. 2015 Feb;25(1):41-2. doi: 10.1097/YPG.0000000000000073. PubMed PMID: 25419637.

Wegener S, **Linnebank M**, Martin R, Valavanis A, Weller M. Clinically isolated neurosarcoidosis: a recommended diagnostic path. *Eur Neurol*. 2015;73(1-2):71-7. doi: 10.1159/000366199. Epub 2014 Nov 12. PubMed PMID: 25401278.

Pflugshaupt T, Nösberger M, Gutbrod K, Weber KP, **Linnebank M**, Brugger P. Bottom-up Visual Integration in the Medial Parietal Lobe. *Cereb Cortex*. 2016 Mar;26(3):943-9. doi: 10.1093/cercor/bhu256. Epub 2014 Oct 19. PubMed PMID: 25331599.

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Kunkel S, **Linnebank M**, Staudacher D, Spirig R. [Supporting the self efficacy of the patient]. *Krankenpf Soins Infirm*. 2014;107(1):30-1. German. PubMed PMID: 24575566.

Valavanis A, Schwarz U, Baumann CR, Weller M, **Linnebank M**. Amyotrophic lateral sclerosis after embolization of cerebral arteriovenous malformations. *J Neurol*. 2014 Apr;261(4):732-7. doi: 10.1007/s00415-014-7260-8. Epub 2014 Feb 8. PubMed PMID: 24509642.

Haertle M, Kallweit U, Weller M, **Linnebank M**. The presence of oligoclonal IgG bands in human CSF during the course of neurological diseases. *J Neurol*. 2014 Mar;261(3):554-60. doi: 10.1007/s00415-013-7234-2. Epub 2014 Jan 22. PubMed PMID: 24449061.

Ineichen BV, Keskitalo S, Farkas M, Bain N, Kallweit U, Weller M, Klotz L, **Linnebank M**. Genetic variants of homocysteine metabolism and multiple sclerosis: a case-control study. *Neurosci Lett*. 2014 Mar 6;562:75-8. doi: 10.1016/j.neulet.2014.01.008. Epub 2014 Jan 9. PubMed PMID: 24412677.

Kallweit U, Baumann CR, Harzheim M, Hidalgo H, Pöhlau D, Bassetti CL, **Linnebank M**, Valko PO. Fatigue and sleep-disordered breathing in multiple sclerosis: a clinically relevant

association? *Mult Scler Int.* 2013;2013:286581. doi: 10.1155/2013/286581. Epub 2013 Oct 22. PubMed PMID: 24251039; PubMed Central PMCID: PMC3819751.

Ramirez JO, Cabrera SA, Hidalgo H, Cabrera SG, **Linnebank M**, Bassetti CL, Kallweit U. Is preeclampsia associated with restless legs syndrome? *Sleep Med.* 2013 Sep;14(9):894-6. doi: 10.1016/j.sleep.2013.03.013. Epub 2013 Jul 23. PubMed PMID: 23891236.

Schippling S, Kempf C, Büchele F, Jelcic I, Bozinov O, Bont A, **Linnebank M**, Sospedra M, Weller M, Budka H, Martin R. JC virus granule cell neuronopathy and GCN-IRIS under natalizumab treatment. *Ann Neurol.* 2013 Oct;74(4):622-6. doi: 10.1002/ana.23973. Epub 2013 Sep 16. PubMed PMID: 23868420.

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Preiningerova JL, Baumhackl U, Csepany T, Czaplinski A, Deisenhammer F, Derfuss T, Fabjan TH, Fazekas F, Fuchs S, Havrdova E, Ledinek AH, Illes Z, Jazbec SS, Klimova E, Komoly S, Kurca E, **Linnebank M**, Lisy L, Mares J, Prochazkova L, Csilla R, Szilasiova J, Stourac P, Talab R, Turcani P, Vachova M, Vecsei , Vodusek D, Zapletalova O, Berger T. Recommendations for the use of prolonged-release fampridine in patients with multiple sclerosis (MS). *CNS Neurosci Ther.* 2013 May;19(5):302-6. doi: 10.1111/cns.12101. PubMed PMID: 23607697.

Semmler A, Prost JC, Smulders Y, Smith D, Blom H, Bigler L, **Linnebank M**. Methylation metabolism in sepsis and systemic inflammatory response syndrome. *Scand J Clin Lab Invest.* 2013 Aug;73(5):368-72. doi: 10.3109/00365513.2013.785587. Epub 2013 Apr 8. PubMed PMID: 23566119.

Semmler A, Moskau-Hartmann S, Stoffel-Wagner B, Elger C, **Linnebank M**. Homocysteine plasma levels in patients treated with antiepileptic drugs depend on folate and vitamin B12 serum levels, but not on genetic variants of homocysteine metabolism. *Clin Chem Lab Med.* 2013 Mar 1;51(3):665-9. doi: 10.1515/cclm-2012-0580. PubMed PMID: 23382314.

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FTY720 Research Evaluating Effects of Daily Oral Therapy in Multiple Sclerosis (FREEDOMS) Study Group.. Impact of fingolimod therapy on magnetic resonance imaging outcomes in patients with multiple sclerosis. *Arch Neurol.* 2012 Oct;69(10):1259-69. PubMed PMID: 22751847.

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